



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,601	12/19/2001	Richard M. Fischer JR.	55841US002	2882
32692	7590	06/25/2003		
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			EXAMINER	
			PRITCHETT, JOSHUA L	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 06/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/028,601	FISCHER ET AL.
	Examiner Joshua L Pritchett	Art Unit 2872

-- The MAILING DATE of this communication app appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 08 May 2003.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-18 is/are pending in the application.  
4a) Of the above claim(s) 1-10 and 18 is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 11-17 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 19 December 2001 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some \* c)  None of:

1.  Certified copies of the priority documents have been received.

2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)  The translation of the foreign language provisional application has been received.

15)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)      4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_ .  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)      5)  Notice of Informal Patent Application (PTO-152)  
3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 .      6)  Other: \_\_\_\_\_ .

## **DETAILED ACTION**

This action is in response to Election filed May 8, 2003. The applicant elected claims 11-17 with traverse.

### ***Election/Restrictions***

Applicant's election of claims 11-17 in Paper No. 6 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claims 1-10 and 18 have been withdrawn from consideration.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida (US 4,931,655) in view of Admitted Art.

Regarding claim 11, Yoshida discloses an accelerated weathering device with an optical filter comprising lead glass in the amount of 15-20% by weight (col. 3 lines 14-19). Yoshida lacks reference to the claimed irradiance ratios. Admitted Art teaches on page 7 of the current application that a piece of glass with a lead content of between 0.5 and 50% by weight will simulate natural sunlight. Fig. 7 shows that natural sunlight meets the claimed limitations relating to the ratios of irradiance at various wavelengths. The max daylight plot on Fig. 7 has a first ratio of approximately 0 which is less than  $2.0 \times 10^{-6}$  and a second ratio of approximately 0.0022 which is greater than  $1.2 \times 10^{-3}$ . It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the Yoshida filter produce the characteristics of natural sunlight as taught by the Admitted Art for the purpose of collecting reliable weathering data by duplicating natural sunlight as much as possible.

Regarding claim 12, Yoshida teaches the invention as claimed but lacks reference to the cut-on wavelength. Admitted Art in Fig. 7 shows a cut-on wavelength for natural daylight between 290nm and 300nm (Fig. 7). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the Yoshida reference have a cut-on wavelength as taught by the Admitted Art for the purpose of more closely duplicating the characteristics of natural sunlight.

Regarding claim 13, Yoshida discloses the illumination from the light source includes a spectral component of at least 290nm to 400nm (Fig. 1).

Regarding claim 15, claim 15 is rejected for the same reasons stated above for the rejection of claims 11 and 12.

Regarding claim 14, Yoshida teaches the invention as claimed but lacks reference to the claimed irradiance values. Admitted Art states that a typical irradiance value is  $0.35 \text{ W/m}^2$  on page 8 of the current application. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the Yoshida device have the irradiance values taught by the Admitted Art for the purpose of more closely duplicating the characteristics of natural sunlight.

Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida in view of Admitted Art and Kodama (JP 02-188442).

Regarding claim 16, Yoshida in combination with Admitted Art teaches the invention as claimed and discussed in the rejection of claim 11, but lacks reference to the inclusion of a UV transmissive filter. Kodama teaches the use of a UV transmissive filter (abstract lines 1-2). It would have been obvious to a person of ordinary skill in the art to couple the UV transmissive filter of Kodama with the weather device of Yoshida for the purpose of filtering out very high energy light in the X-ray and gamma ray regions of the incident light prior to the light contacting the lead glass to prevent premature degradation of the lead glass filter.

Regarding claim 17, Yoshida in combination with Admitted Art teaches the invention as claimed but lacks reference to the claimed limitations of the UV transmissive filter. Kodama teaches the UV transmissive filter having at least 60% transmission of light at 250nm and at least 80% transmission of light at 300nm (Fig. 2). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the UV transmissive filter of Kodama in the weather device taught by Yoshida for the purpose of minimizing the amount of X-ray and

gamma ray light incident on the lead glass filter while maintaining a large amount of UV and near UV light incident the lead glass filter.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hagiwara (US 6,108,126) teaches a light source that has a lead glass covering to emit near UV light.

Oguma (US 6,225,244) teaches a lead glass filter with transmission wavelengths in the near UV region.

Minematu (US 4,859,903) teaches a light source to mimic the light emissions of natural sunlight.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua L Pritchett whose telephone number is 703-305-7917.

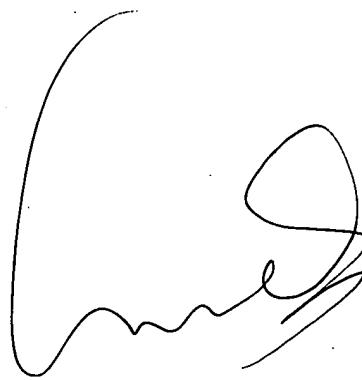
The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 703-305-0024. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Art Unit: 2872

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JLP  
June 18, 2003



Audrey Chang  
Primary Examiner  
Technology Center 2800